UNIT -IV

Management Information System

Functional Applications of Information System

Venue: Liberty College, Anamnagar

Date: 27th November 2016

By: Laxman Pokhrel, MBA-MIS
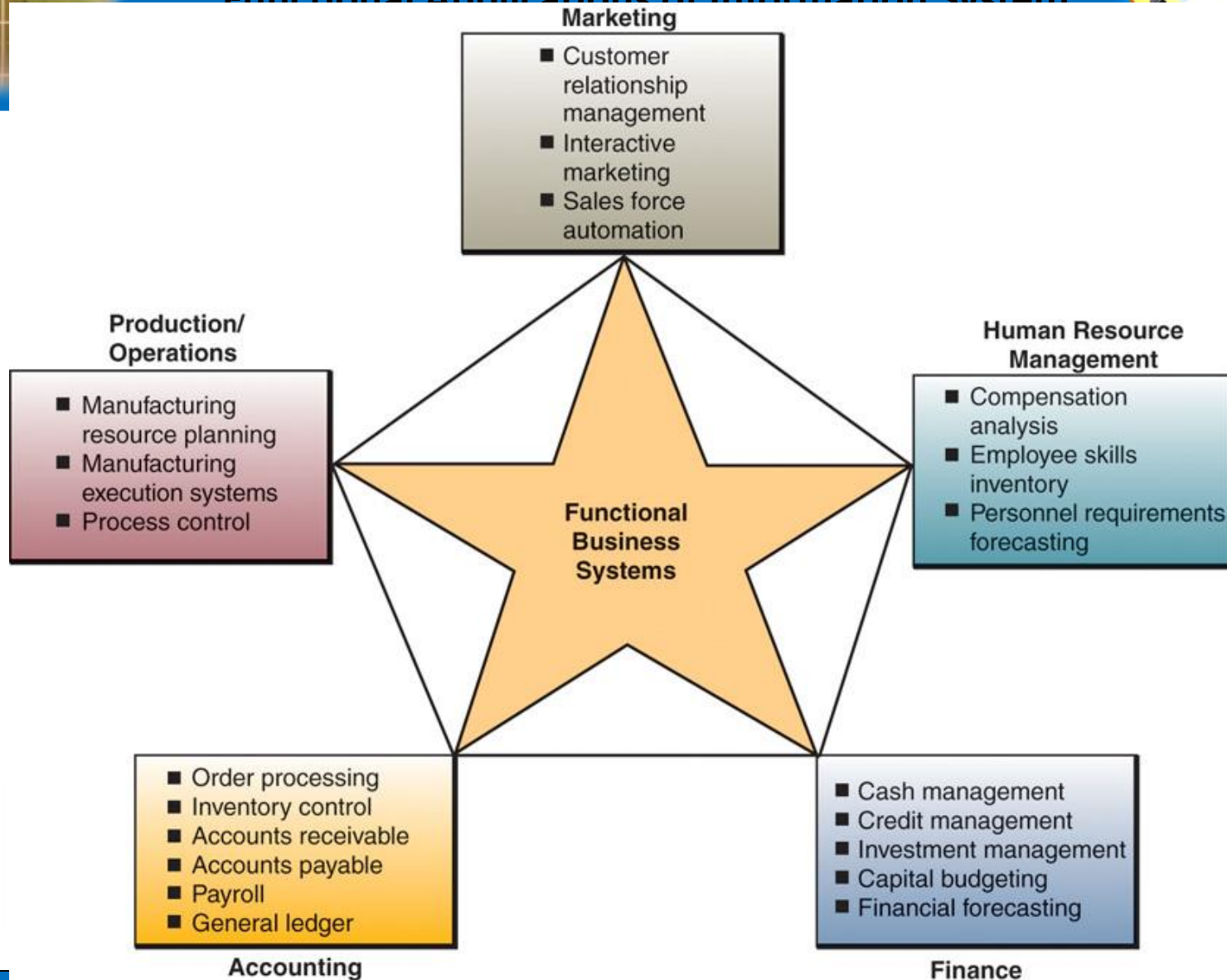
IS Classifications by Scope

Functional Business Systems support basic business functions

- Information systems that support the business functions of accounting, finance, marketing, operations management, and human resource management

Marketing
- Customer relationship management
- Interactive marketing
- Sales force automation

Production/Operations
- Manufacturing resource planning
- Manufacturing execution systems
- Process control

Functional Business Systems

Human Resource Management
- Compensation analysis
- Employee skills inventory
- Personnel requirements forecasting

Accounting
- Order processing
- Inventory control
- Accounts receivable
- Accounts payable
- Payroll
- General ledger

Finance
- Cash management
- Credit management
- Investment management
- Capital budgeting
- Financial forecasting

Interactive Marketing

Customer-focused marketing process that is based on using the Internet, intranets, and extranets to establish two-way transactions between a business and its customers or potential customers

Goal:

Use networks to attract and keep customers who will become partners with the business in creating, purchasing, and improving products and services
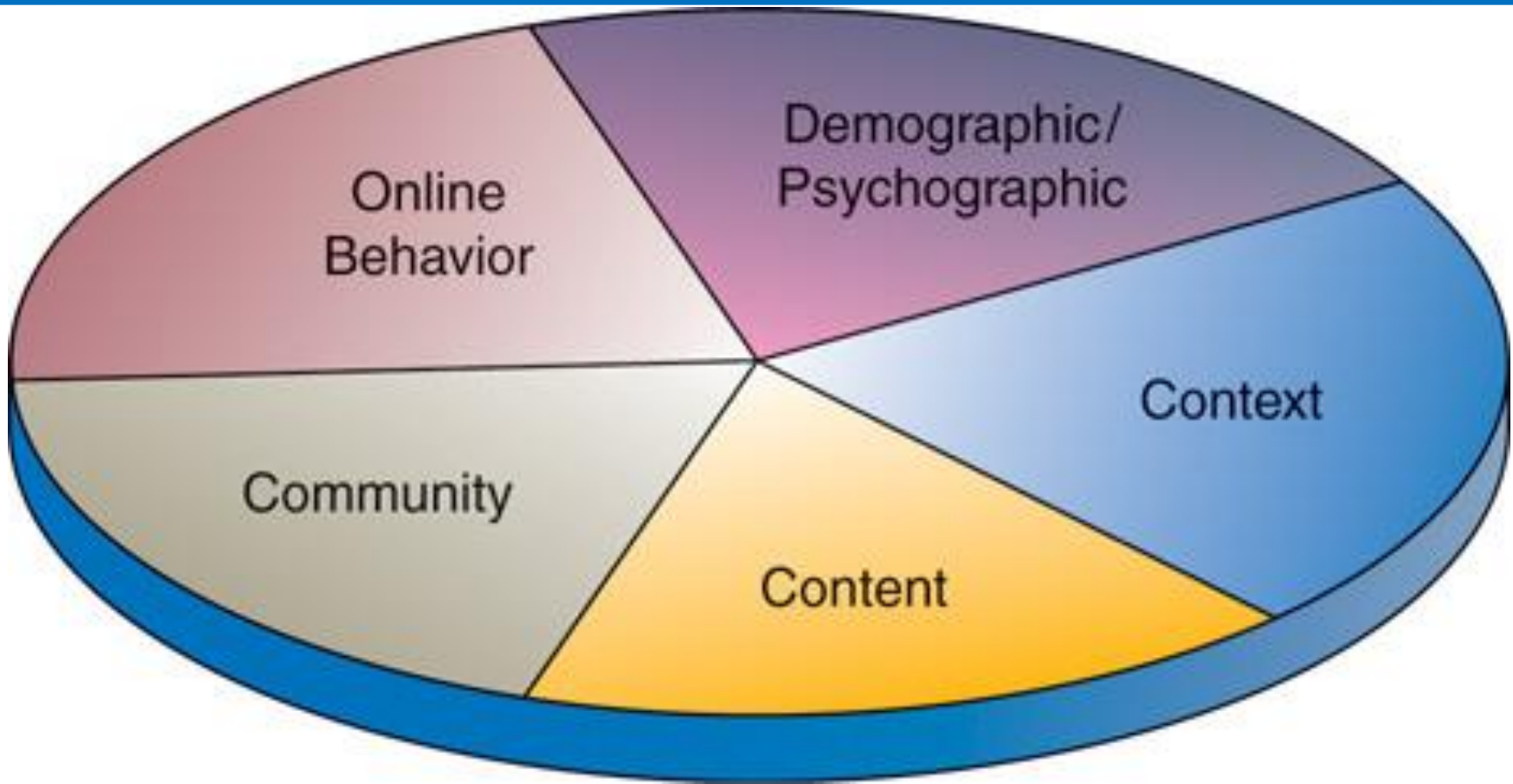
Targeted Marketing

Tool for developing advertising and promotion
f jl j   j l j f h   f   j-commerce
initiatives, as well as its traditional business venues

Targeted Marketing Components
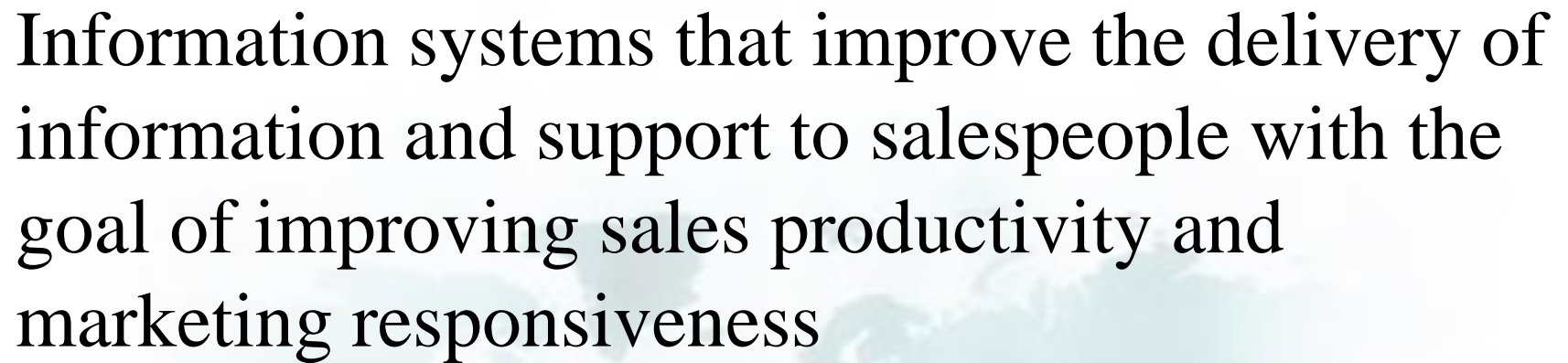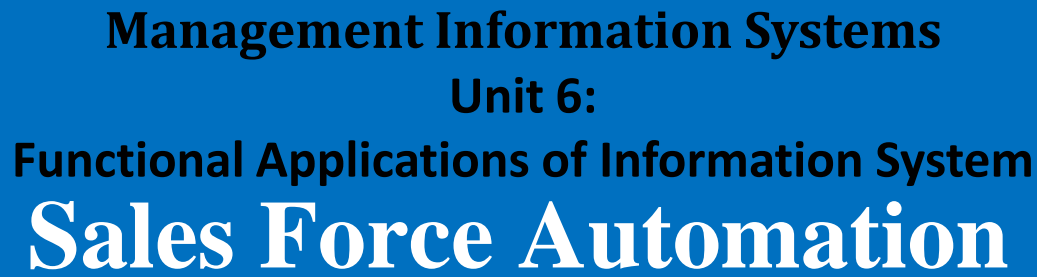
Targeted Marketing Components

Community customize advertising to appeal to people of specific virtual communities

Content advertising placed on a variety of selected websites

Context advertising placed on web pages that are relevant to the content of a product or service

Demographic/Psychographic web marketing efforts aimed at specific types or classes or people

Online Behavior promotion efforts tailored to each visit to a site by an individual

Sales Force Automation

Information systems that improve the delivery of information and support to salespeople with the goal of improving sales productivity and marketing responsiveness

Manufacturing Systems

Information systems that support the production/operations function that includes all activities concerned with the planning and control of the processes producing goods and services
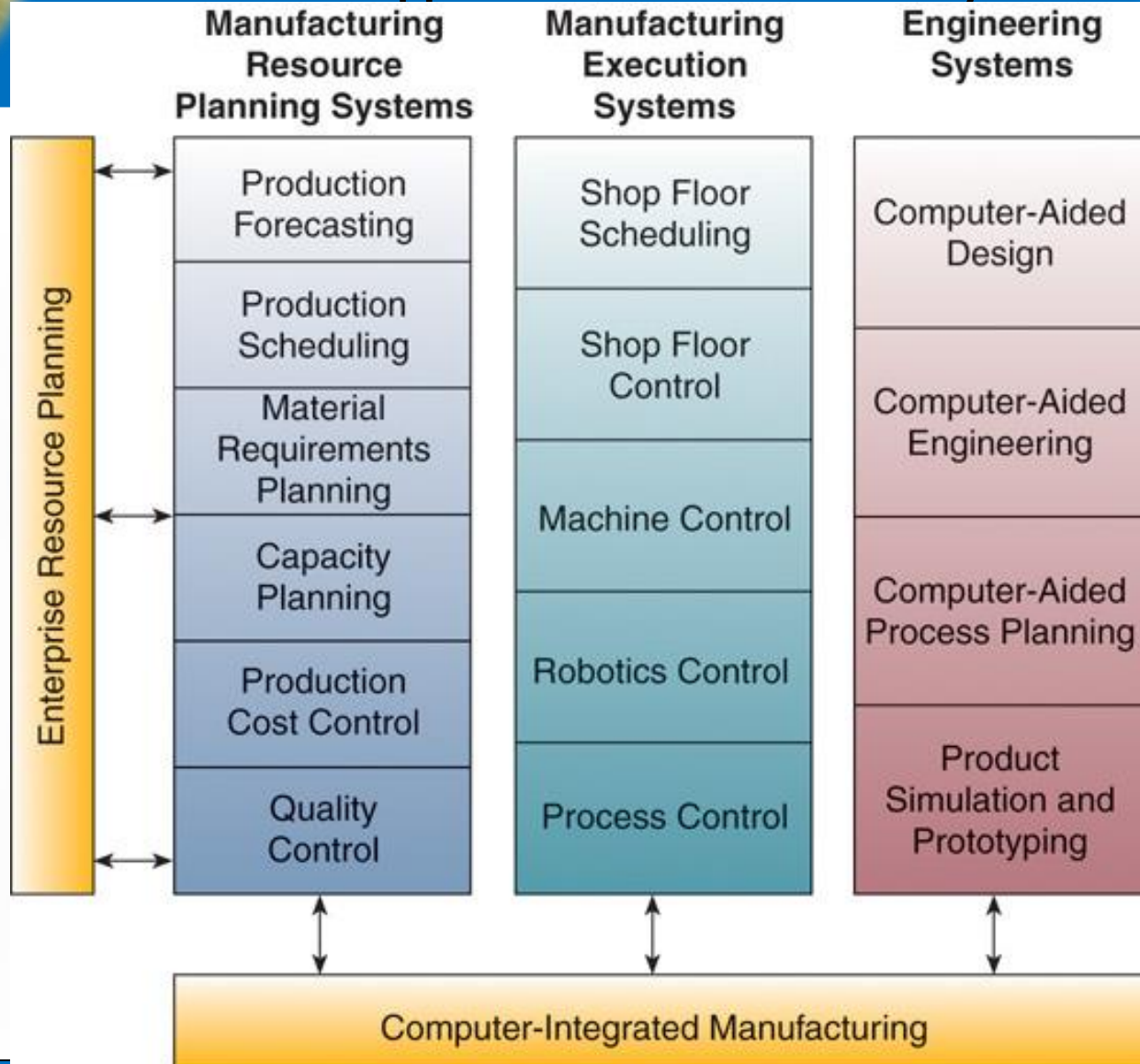
Manufacturing Systems

Manufacturing Resource Planning Systems	Manufacturing Execution Systems	Engineering Systems
Production Forecasting	Shop Floor Scheduling	Computer-Aided Design
Production Scheduling	Shop Floor Control	Computer-Aided Engineering
Material Requirements Planning	Machine Control	
Capacity Planning		Computer-Aided Process Planning
Production Cost Control	Robotics Control	
Quality Control	Process Control	Product Simulation and Prototyping

Enterprise Resource Planning

Computer-Integrated Manufacturing

Computer-Integrated Manufacturing (CIM)

Objectives:

Simplify production processes, product designs, and factory organization as a vital foundation to automation and integration

Automate production processes and the business functions that support them with computers, machines, and robots

Integrate all production and support processes using computer networks, cross-functional business software, and other information technologies

CIM Systems

Computer-aided manufacturing (CAM) - Information systems that automate the production process

Manufacturing execution systems (MES) performance monitoring information systems for factory floor operations. They mainly monitor, track and control materials, equipment, personnel, instructions and specifications and production facilities
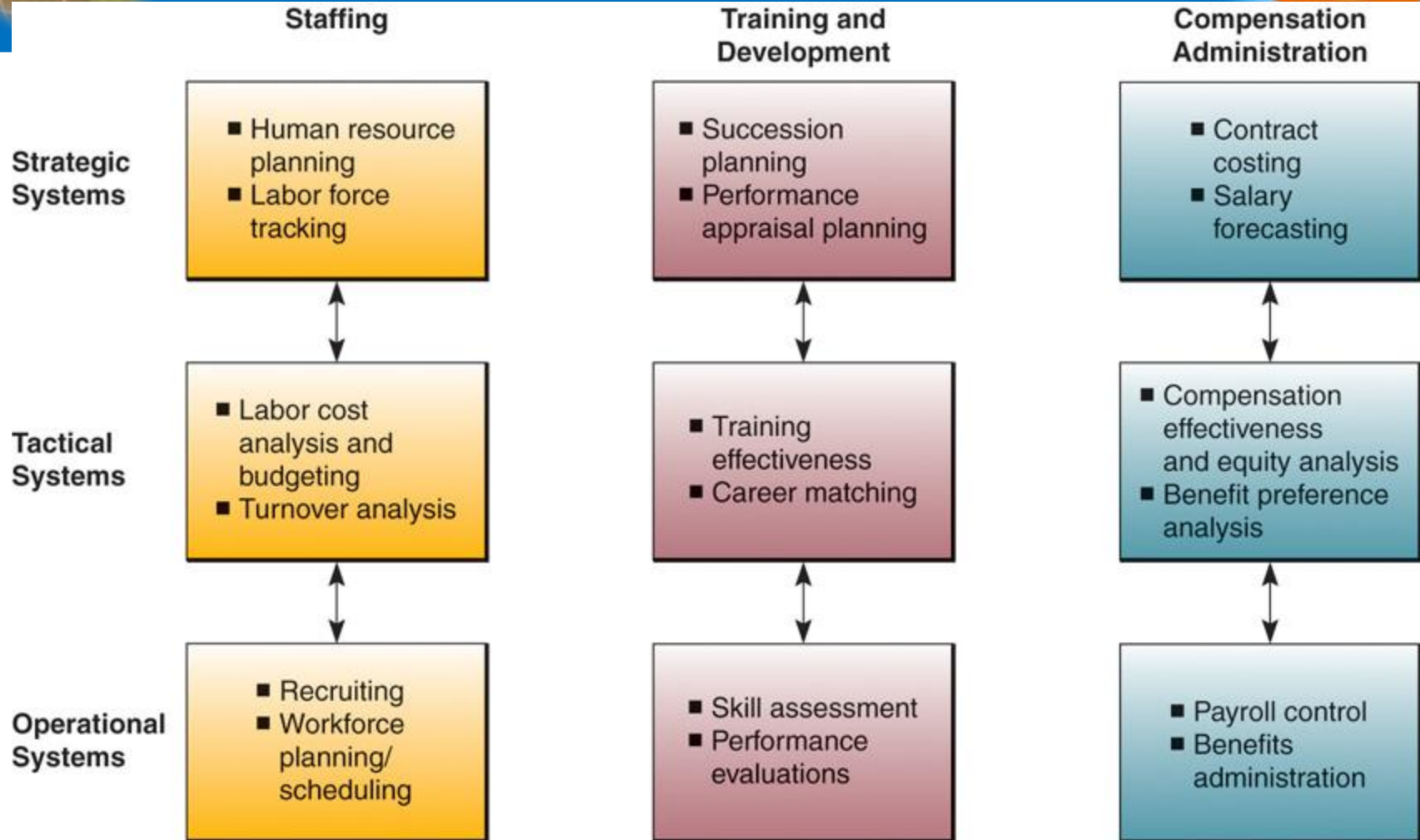
Process Control   control ongoing physical processes

Machine Control   controls the actions of machines

Human Resource Systems

	Staffing	Training and Development	Compensation Administration
Strategic Systems	■ Human resource planning ■ Labor force tracking	■ Succession planning ■ Performance appraisal planning	■ Contract costing ■ Salary forecasting
Tactical Systems	■ Labor cost analysis and budgeting ■ Turnover analysis	■ Training effectiveness ■ Career matching	■ Compensation effectiveness and equity analysis ■ Benefit preference analysis
Operational Systems	■ Recruiting ■ Workforce planning/scheduling	■ Skill assessment ■ Performance evaluations	■ Payroll control ■ Benefits administration

HRM and the Internet

Recruiting employees through recruiting services and databases on the World Wide Web

Posting messages in selected Internet newsgroups

Communicating with job applicants via e-mail

HRM and Corporate Intranets

Process common HRM applications

Allow HRM department to provide around-the-clock services

Disseminate valuable information faster than through previous company channels

Collect information from employees online

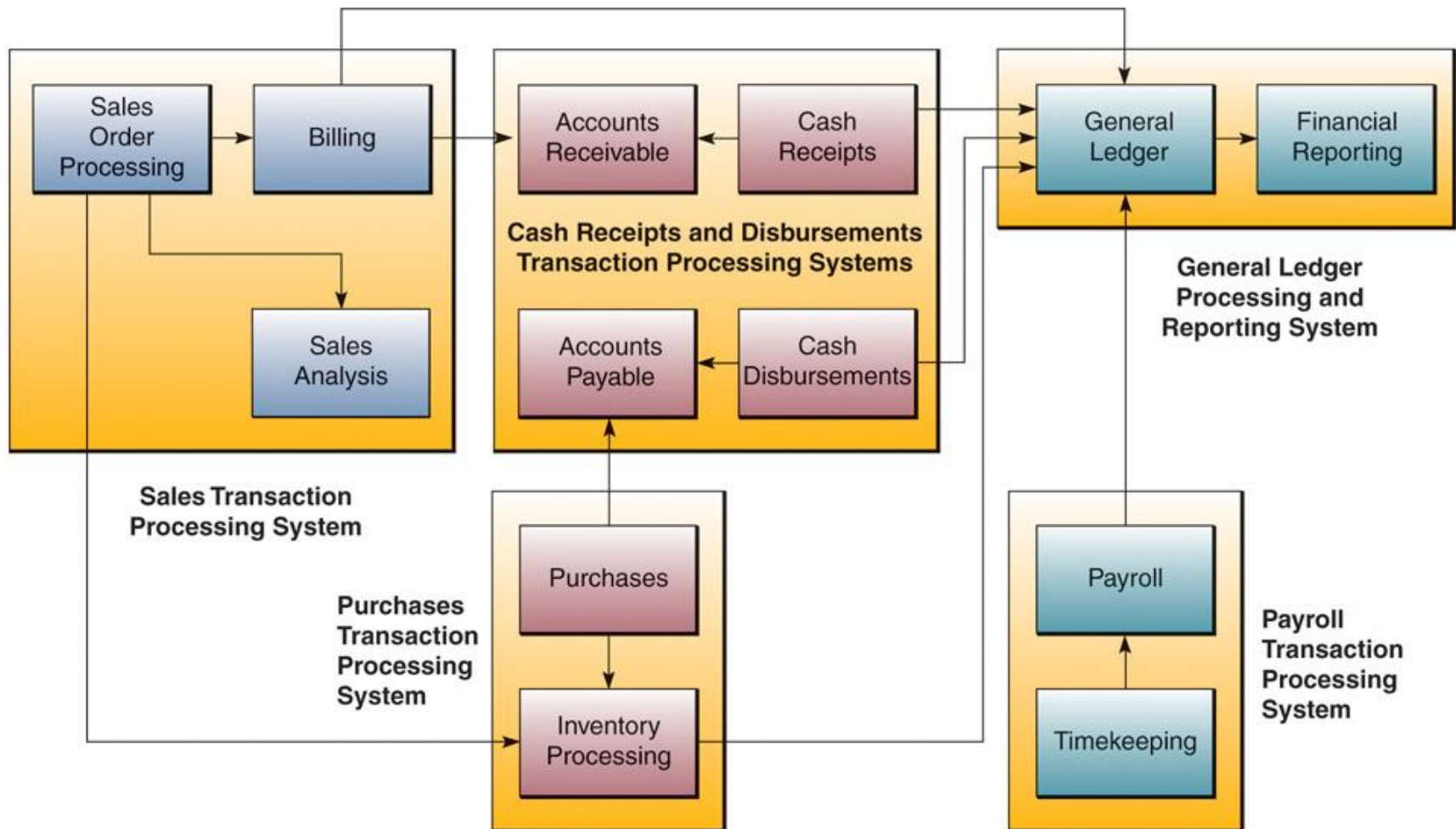Allow managers and other employees to perform HRM tasks with little intervention by the HRM department

Accounting Information Systems

Common Business Accounting Systems

Order Processing Captures and processes customer orders and produces data for inventory control and accounts receivable

Inventory Control Processes data reflecting changes in inventory and provides shipping and reorder information

Accounts Receivable Records amounts owed by customers and produces customer invoices, monthly customer statements, and credit management reports

Accounts Payable Records purchases from, amounts owed to, and payments to suppliers, and produces cash management reports

Payroll Records employee work and compensation data and produces paychecks and other payroll documents and reports

General Ledger Consolidates data from other accounting systems and produces the periodic financial statements and reports of the business
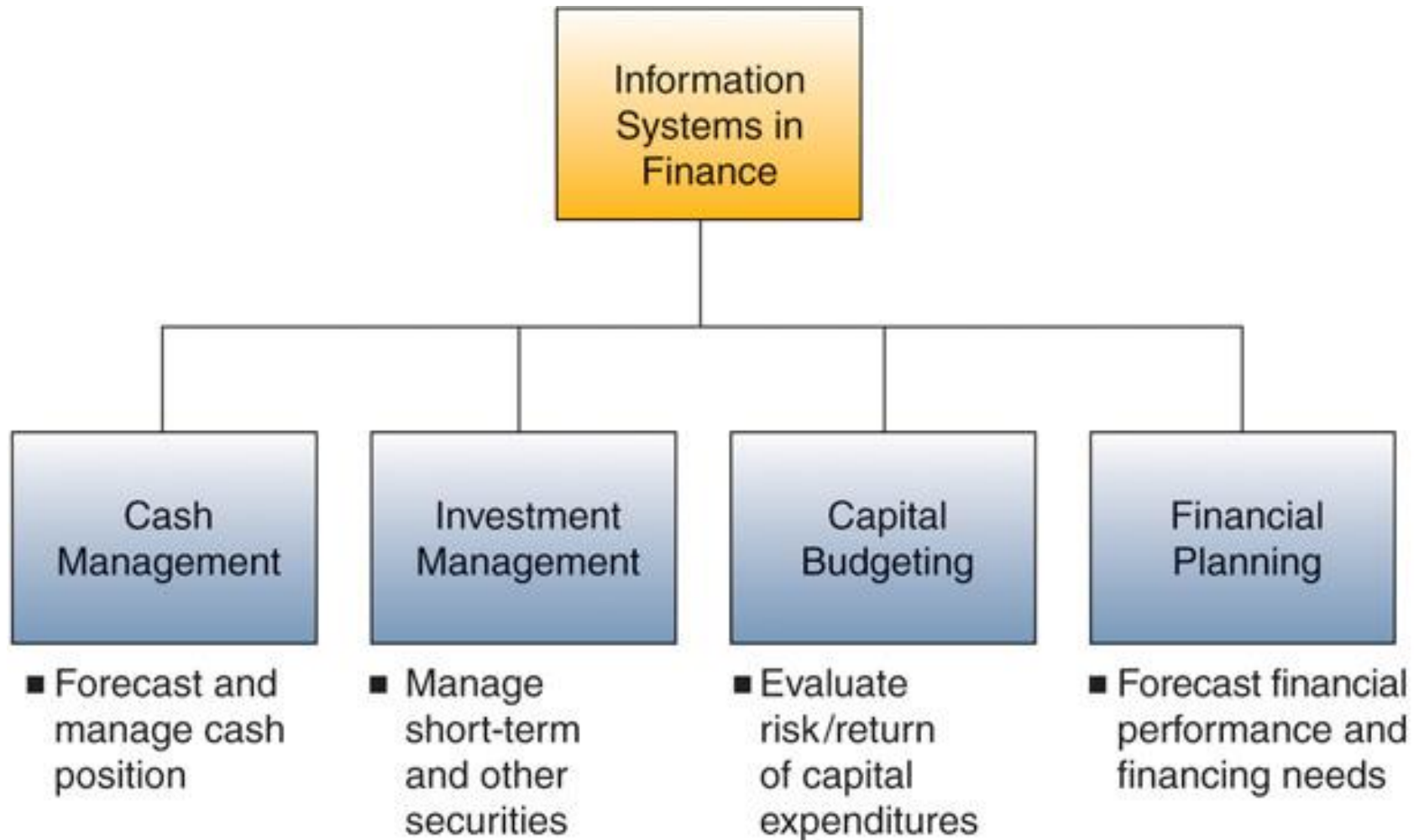
Financial Management Systems

```
                    ┌─────────────────┐
                    │   Information   │
                    │   Systems in    │
                    │    Finance      │
                    └─────────────────┘
```

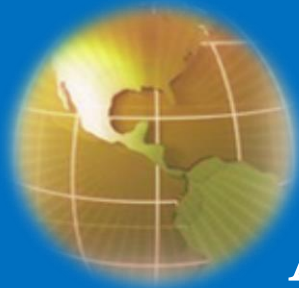| Cash Management	Investment Management	Capital Budgeting	Financial Planning
■ Forecast and manage cash position	■ Manage short-term and other securities	■ Evaluate risk/return of capital expenditures	■ Forecast financial performance and financing needs

Financial Management Systems

Capital Budgeting   evaluating the profitability and financial impact of proposed capital expenditures

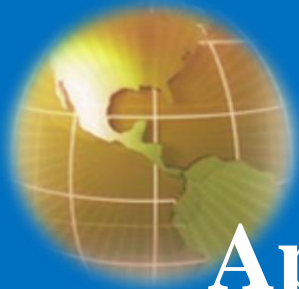Financial Planning   evaluating the present and projected financial performance of a business

Application of Functional Systems

Computer Reservation System (CRS),

A **computer reservations system** or central **reservation system** (**CRS**) is a **computerized system** used to store and retrieve information and conduct transactions related to air travel, hotels, car rental, or activities. Originally designed and operated by airlines, CRSes were later extended for the use of travel agencies.
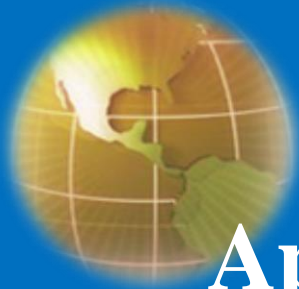
Application of Functional Systems

Global Distribution System (GDS),

A **Global Distribution System** (**GDS**) is a network operated by a company that enables automated transactions between travel service providers (mainly airlines, hotels and car rental companies) and travel agencies.

Application of Functional Systems

Property Management Systems (PMS),

Property management systems also known as PMS or Hotel Operating **System** (Hotel OS), under business terms may be used in real estate of mind, manufacturing, logistics, intellectual **property**, government or hospitality accommodation **management**.

Application of Functional Systems

Point of Sales Systems (POS)

A retail **point of sale system** typically includes a cash register (which in recent times comprises a computer, monitor, cash drawer, receipt printer, customer display and a barcode scanner) and the majority of retail **POS systems** also include a debit/credit card reader.

Questions??